ABSTRACT

A directory system for providing directory services in a communications network, including a plurality of memory segments for storing respective subsets of directory data for each directory object. The memory segments include attribute segments, object segments, and directory information tree (DIT) segments for respectively storing attribute, management, and hierarchical structure data for directory objects. The directory system monitors usage of directory data stored in the memory segments and redistributes at least a portion of the directory data in the memory segments based on the observed usage to improve the performance of directory services. The directory system also provides transactional messaging services to users.